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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/661,702	09/14/2000	Greg R. Andrews	61311008	8993

7590 10/14/2003
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EXAMINER

HAMLIN, DERRICK G

ART UNIT PAPER NUMBER

1751

DATE MAILED: 10/14/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/661,702

Applicant(s)

ANDREWS ET AL.

Examiner

Derrick G. Hamlin

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 September 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-7 is/are allowed.
- 6) ☒ Claim(s) 8-15 is/are rejected.
- 7) ☒ Claim(s) 16 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

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DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 8-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Coffey et al. (US 5386968).

Coffey discloses de-icing compositions used on aircraft wing surfaces containing glycols, surfactants and other additives (abstract). The composition contain a surfactant and may contain optional surfactants, such as block copolymers of ethylene oxide and propylene oxide and related nonionic surfactants and mixtures thereof. The reference also teaches that it is know in the art to use surfactants with alkylene polyols in the coolant art. The use of glycerol is also taught.

The reference fails to teach the use HLB of the surfactants.

Although the reference fails to teach the use HLB of the surfactants, it does teach several specific surfactants may be used as well as a general teaching of surfactants. It is the examiners position that the general teaching of surfactants reads on the instant claims, rendering them unpatentable in the absence of showing superior or unexpected results.

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Therefore, since the reference teaches that a discloses de-icing compositions containing glycols, surfactants and other additives, such as block copolymers of ethylene oxide and propylene oxide, polyols and glycerol, it would have been obvious to one of ordinary skill in the art at the time the invention was made to create the instantly claimed anti icing composition.

Claims 13-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Coffey et al. (US 5386968) as applied to claims 8-12 above, and further in view of Ma et al. (US 4954279).

The primary reference fails to teach the use of a polyvinyl alcohol. The secondary reference is relied upon for it's teaching that the polyvinyl alcohol is known in the are to be used as an additive that improves the characteristics of an anti icing composition (col. 5, lines 56-63). Although the use of a polyvinyl alcohol well know in the art, one would be motivated to use the said component in the with the anti icing composition of Coffey, as the reference teaches that it would improve the characteristics of an anti icing composition.

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to create the instantly claimed anti icing composition in view of the combination of Coffey and Ma.

In view of the forgoing, the above claims have failed to be patently distinguishable over prior art.

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The remaining references listed on form(s) 892 and 1449 have been reviewed by the examiner and are considered to be cumulative to or less material than the prior art references relied upon in the rejection above.

Allowable Subject Matter

Claims 1-7 are allowed.

The reference fails to teach the use of a hydroxy alcohol with a acrylic emulsion polymer and a water swellable, colloid-forming clay mineral in an aqueous anti-icing composition.

Claim 16 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Although the use of a hydrogen peroxide is know to be used with a polyol in a cleaning composition, there is nothing in the prior art of reference to suggest that it could be used in a anti icing composition.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Derrick G. Hamlin whose telephone number is (703) 305-0590. The examiner can normally be reached on Monday-Thursday and alternating Fridays from 8:30 AM - 5:00 PM.

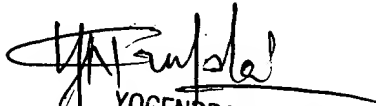

If reasonable attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dr. Yogendra Gupta, can be reached on (703) 308-4708. The fax phone number for this Group is (703) 872-9310.

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Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-0661.

Derrick G. Hamlin

9/28/03



YOGENDRA N. GUPTA
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